

# **GARAGE DOOR OPENER**

# WITH DUAL REMOTES

**Model 65712** 

#### SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools<sup>®</sup>.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: http://www.harborfreight.com



Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

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TROUBLESHOOTING	

#### **SAVE THIS MANUAL**

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

# **IMPORTANT SAFETY** INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

# **A** DANGER

**DANGER** indicates a hazardous

situation which, if not avoided, will result in death or serious injury.

# **AWARNING**

WARNING indicates a

hazardous situation which, if not avoided, could result in death or serious injury.

# **ACAUTION**

CAUTION, used with the safety

alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## NOTICE

NOTICE is used to address practices not related to personal injury.

## **CAUTION**

**CAUTION**, without the safety alert

symbol, is used to address practices not related to personal injury.

## **General Safety Warnings**



WARNING Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

- Work area safety
  - a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
  - b. Do not operate the Garage Door Opener in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power equipment creates sparks which may ignite the dust or fumes.
  - c. Keep children and bystanders away while operating the Garage Door Opener. Distractions can cause you to lose control.
- 2. **Electrical safety** 
  - a. The Garage Door Opener's electrical Plug must match the Outlet. Never modify the Plug in any way. Do not use any adapter Plugs with grounded power equipment. Unmodified Plugs and matching Outlets will reduce risk of electric shock.

- b. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- c. Do not expose the Garage Door Opener to rain or wet conditions. Water entering power equipment will increase the risk of electric shock.
- d. Do not abuse the Power Cord.

  Never use the Cord for unplugging the Garage Door Opener. Keep the Cord away from heat, oil, sharp edges or moving parts. Damaged or entangled Cords increase the risk of electric shock.
- e. If operating the Garage Door Opener in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

#### 3. Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating the Garage Door Opener. Do not use power equipment while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power equipment may result in serious personal injury.
- b. Use personal protective equipment when assembling the Garage Door Opener. Wear ANSI-approved safety goggles. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Do not overreach when assembling the Garage Door Opener.

- Keep proper footing and balance at all times. This enables better control of the power equipment in unexpected situations.
- d. Dress properly when assembling the Garage Door Opener. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.

  Loose clothes, jewelry or long hair can be caught in moving parts.
- 4. Power equipment use and care
  - a.Do not force the Garage Door
    Opener. Use the correct power
    equipment for your application.
    The correct power equipment will do
    the job better and safer at the rate for
    which it was designed.
  - b. Do not use the Garage Door Opener if the Remote Controls do not turn it on and off. Any power equipment that cannot be controlled with its Remote Control is dangerous and must be repaired.
  - c. Disconnect the electrical Plug from the power source before making any adjustments, or changing accessories. Such preventive safety measures reduce the risk of starting the power equipment accidentally.
  - d. Store the Remote Controls out of the reach of children and do not allow persons unfamiliar with the Garage Door Opener or these instructions to operate the product. Power equipment is dangerous in the hands of untrained users.
  - e. Maintain the Garage Door Opener.
    Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power equipment's

operation. If damaged, have the power equipment repaired before use. Many accidents are caused by poorly maintained power equipment.

#### 5. Service

a. Have your Garage Door Opener serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power equipment is maintained.

## **Specific Safety Warnings**

- Maintain labels and nameplates on the Garage Door Opener. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- To avoid serious personal injury from entanglement, remove all ropes connected to the Garage Door Opener before installing the unit. Installation and wiring must be in compliance with your local building and electrical codes. Connect the Power Cord of this unit only to properly earthed mains.
- 3. Keep the Garage Door Opener balanced. Sticking or binding doors must be repaired or replaced. Garage doors, door springs, cables, pulleys, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt to loosen, move or adjust them. Instead, have a qualified service technician perform the adjustments and repairs.
- The "safety reverse system test" is very important. The Garage Door Opener MUST reverse on contact

- with a 1-1/2" obstacle placed on the floor. Failure to properly adjust the Garage Door Opener may result in serious personal injury from a closing Garage Door. Repeat the test once a month and make any needed adjustments.
- 5. The Garage Door Opener must not extend over a public byway during operation.
- Fasten the "CHILD WARNING" label adjacent to the lighted door control button as a reminder of safe operating procedures. Disengage all existing garage door locks to avoid damage to the Garage Door Opener.
- 7. Any Garage Door Opener control buttons (if installed) MUST be located where the Garage Door is visible, but out of the reach of children. Do not allow children to operate control buttons or Remote Controls. Serious personal injury from a closing Garage Door may result from misuse of the Opener.
- 8. Activate Remote Controls ONLY when the Garage Door Opener is in full view, free of obstructions and the Opener is properly adjusted. No one should enter or leave the garage while the Door is in motion. Do not allow children to play near the Door.
- Use the Manual Release only to disengage the Trolley and, if possible, only when the Door is closed. Do not use the red Handle to pull the Door open or closed.
- This product is provided with a Transformer and Power Supply Cord of special design which, if damaged,

- MUST be replaced by a qualified service technician.
- 11. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
  - Avoid operating alone.
  - Do not use with power switch locked on
  - Properly maintain and inspect to avoid electrical shock.
  - Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.
- 12. WARNING: Handling the Power Cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, et seq.)
- 13. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



#### GROUNDING

# **AWARNING**

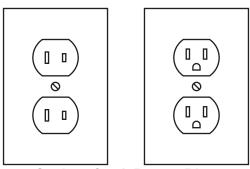
TO PREVENT ELECTRIC SHOCK

AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:



Check with a qualified electrician if you are in doubt as to whether the Outlet is properly grounded. Do not modify the Power Cord Plug provided with the equipment. Never remove the grounding prong from the Plug. Do not use the equipment if the Power Cord or Plug is damaged. If damaged, have it repaired by a service facility before use. If the Plug will not fit the Outlet, have a proper Outlet installed by a qualified electrician.

# Double Insulated Tools: Tools with Two Prong Plugs



**Outlets for 2-Prong Plug** 

Equipment marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electri-

- cal Code. (See Outlets for 2-Prong Plug.)
- Double insulated equipment may be used in either of the 120 volt Outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

#### **Extension Cords**

- Double Insulated equipment can use either a two or three wire Extension Cord
- 2. As the distance from the supply Outlet increases, you must use a heavier gauge Extension Cord. Using Extension Cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible equipment damage.

  (See Table A.)
- The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge Cord can carry a higher current than a 16 gauge Cord. (See Table A.)
- When using more than one Extension Cord to make up the total length, make sure each Cord contains at least the minimum wire size required.
  (See Table A.)
- If you are using one Extension Cord for more than one tool or equipment, add the nameplate amperes and use the sum to determine the required minimum Cord size. (See Table A.)
- Make sure the Extension Cord is properly wired and in good electrical condition. Always replace a damaged Extension Cord or have it repaired by a qualified electrician before using it.
- 7. Protect the Extension Cords from

sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)					
NAMEPLATE	EXTENSION CORD LENGTH				
(at full load)	25'	50'	75'	100'	150'
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-
* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.					

# **Symbology**

	Double Insulated
<b>(1)</b>	Canadian Standards Association
(UL)	Underwriters Laboratories, Inc.
V~	Volts Alternating Current
Α	Amperes
n <sub>0</sub> xxxx/min.	No Load Revolutions per Minute (RPM)

|--|

SPECIFICATIONS				
Product Applications	Fits One-Piece Doors with Horizontal Track and Sectional Doors with Curved Track. *Not for Use with One-Piece Doors with Horizontal and Vertical Track, Double-Winged Doors, or Canopy Doors.			
Electrical Requirements	120 V~ / 60 Hz / 120 Watts 1/2 HP, 24 VDC Motor Voltage Power Plug: 2-Prong, Polarized Power Cord: 18 AWG x 2C SVT			
Remote Controls	2 Remote Controls (Included) 100 Feet Remote Range 315 MHz Frequency 1 Button with Red L.E.D.'s (UP/DOWN) 1 A27-12 VDC Battery (Qty. 1 ea., Included) Chrome Snap/Shut Keychain			
Additional Features	Timed Light-Out/60 Watt Bulb (3 Min. Max.) Adjustable Travel Open & Closing Force Adjustment Safety Reverse System Adjustable Automatic Closing Time			

**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

#### FCC ID: VW5-CASAR

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **UNPACKING**

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

#### **ASSEMBLY**



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

# **AWARNING**

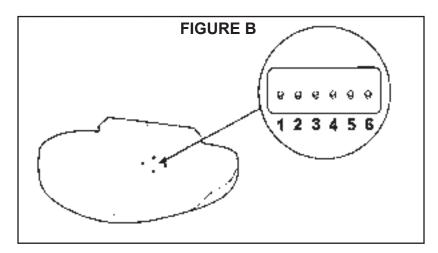
TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Unplug the Garage Door Opener from its electrical Outlet before assembling or making any adjustments to the equipment.

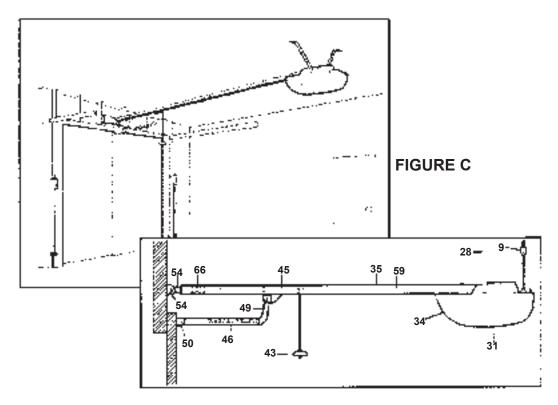
- 1. IMPORTANT: This Garage Door Opener is designed to work with the following types of garage doors:
  - a. One-piece doors with horizontal track only.
  - b. Sectional doors with curved tracks.

#### THIS GARAGE DOOR OPENER IS NOT DESIGNED TO WORK WITH:

 a. One-piece doors with horizontal and vertical tracks, double-wing doors, or canopy doors.



- 2. There is a Connecting Wire Terminal in the unit's Housing (31) which enables the following accessories: (See Figure B.)
  - Terminal #1: For Door Control Button (74) ground connection.
  - Terminal #2: For Door Control Button (74).
  - **Terminal #3:** For additional accessory (not included) ground connection.
  - **Terminal #4:** For additional accessory (not included).
  - Terminal #5: For additional 24 volt power source.
  - Terminal #6: Additional terminal.



3. As you proceed with the assembly, installation, and adjustment steps in this manual you may find it helpful to refer back to this illustration of a completed installation. (See Figure C.)

(54): Header Bracket

(66): Idler Pulley Seat

(45): Trolley

(35): Rail

(59): Chain

(28): Hanging Bracket

(9): Power Cord

(31): Housing

(34): Light Cover

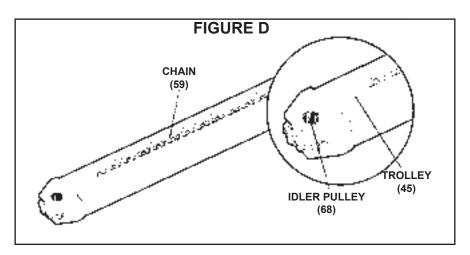
(43): Manual Release Rope & Handle

(49): Curved Door Arm

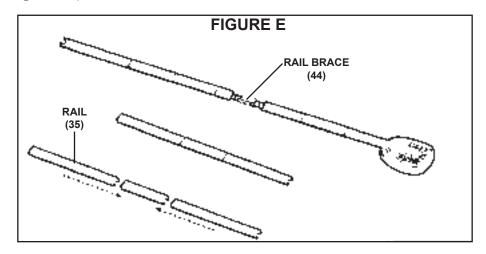
(46): Straight Door Arm

(50): Door Bracket

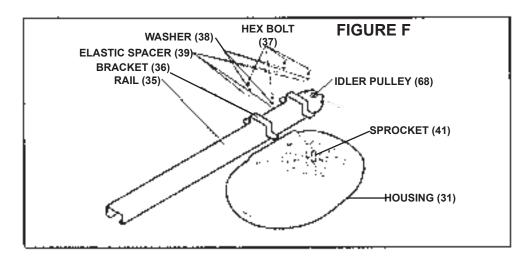
(54): Header Bracket



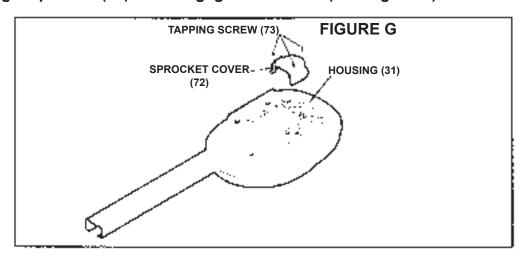
4. The Chain (59), Trolley (45), and Idler Pulley (68) have been pre-assembled in the Rail (35). Make sure these parts are complete and in good condition. (See Figure D.)



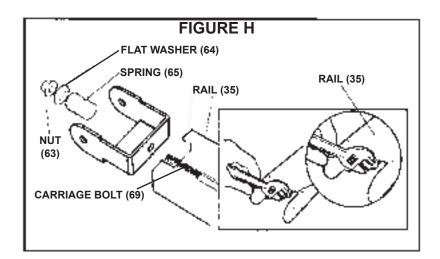
5. Lubricate the inside edges of the Rails (35) using grease. Place the Rails on a flat surface for assembly. All four Rails are interchangeable. Slide a Rail Brace (44) onto a Rail. Connect a Rail by sliding a Rail Brace onto the next Rail. Tap the Rail assembly on a piece of flat scrap wood until all Rails are flush. Repeat this procedure with the remaining Rails. (See Figure E.)



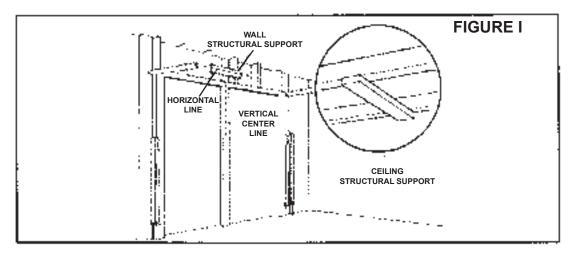
6. Remove the four Hex Bolts (37), four Washers (38), and four Elastic Spacers (39) from the top of the Housing (31). Place the assembled Rail (35) on the Housing, flush with the stop on top of the Housing. Wrap the Chain (59) over the Housing's Sprocket (41). Push the Idler Pulley (68) assembly toward the front of the Rail to eliminate excess slack in the Chain. Align the bolt holes in the two Brackets (36) with the bolt holes in the Housing. Secure the Brackets to the Housing using the four Hex Bolt and four Washers previously removed. IMPORTANT: The Housing's Sprocket (41) must engage the Chain. (See Figure F.)



7. Place the Sprocket Cover (72) on top of the Housing (31) and secure with three Tapping Screws (73). (See Figure G.)

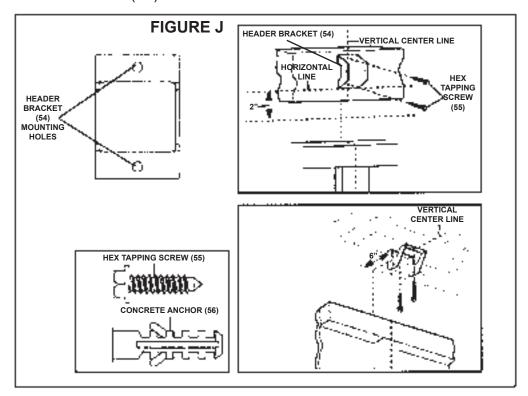


- 8. Slide the Header Bracket (54) onto the Rail (35). Insert a Flat Washer (64) and Spring (65) onto the Carriage Bolt (69). Thread a Nut (63) onto the Carriage Bolt until it is finger tight. Use an open-end wrench (not included) to tighten the Nut until the Chain (59) is not against the inside surface of the Rail (35). (See Figure H.)
- 9. Disengage all existing garage door locks to avoid damage to the door. To avoid entanglement, remove all ropes connected to the garage door.
- 10. The Header Bracket (54) must be firmly fastened to a structural support of the garage. Reinforce the wall or ceiling with a 1-1/2" thick board if necessary. Failure to do so may result in improper operation of the safety reverse system.

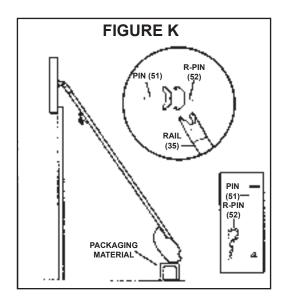


11. You can attach the Header Bracket (54) to either the wall or ceiling. With the garage door closed, mark the vertical center line of the garage door. Extend the line onto the wall above the door. Open the door to the highest point of travel. Draw an intersecting horizontal line on the wall 2" above the high point to provide travel clearance for the top edge of the door. (See Figure I.)

12. Refer to the vertical and horizontal lines drawn in **Figure I** for proper placement of the Header Bracket (54).

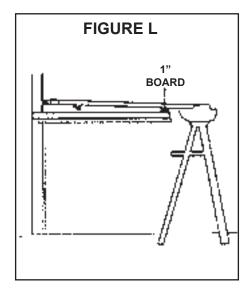


- a. Wall Mount: Center the Header Bracket (54) on the vertical center line with the bottom edge of the Header Bracket on the horizontal line (with the arrow pointing toward the ceiling). Mark the two Header Bracket mounting holes. Drill two 3/16" pilot holes and fasten the Header Bracket with two Hex Tapping Screws (55). (See Figures I and J.)
- b. **Ceiling Mount:** Extend the vertical center line onto the ceiling. Center the Header Bracket (54) on the vertical mark no more than 6" from the wall (with the arrow pointing toward the unit's Housing (31). Mark the two Header Bracket mounting holes. Drill two 3/16" pilot holes and fasten the Header Bracket with two Hex Tapping Screws (55). For a concrete ceiling mount, use the two Concrete Anchors (56) provided. **(See Figures I and J.)**



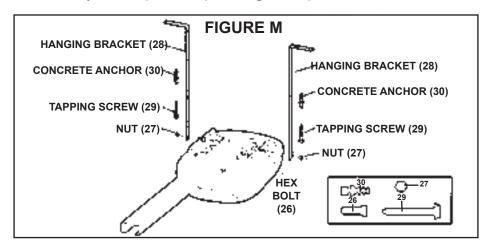
13. Position the Garage Door Opener on the garage floor below the unit's previously installed Header Bracket (54). Use product packaging material to protect the Housing (31). Raise the Rail (35) until the two holes at the end of the Rail align with the two holes in the Header Bracket. Secure the Rail to the Header Bracket using a Pin (57). Insert an R-Pin (58) in the Pin to secure the Pin in place. (See Figure K.)

**Note:** To enable the Rail to clear sectional door springs, it may be necessary to lift the Garage Door Opener onto a temporary support. The Garage Door Opener must be secured to a support or held firmly in place by another person.

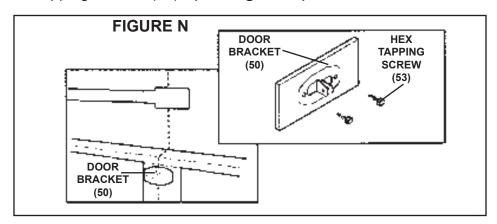


14. A 1" thick board is ideal for setting the proper door-to-Rail (35) distance. Raise the Garage Door Opener onto a stepladder. Open the garage door. Place the 1" thick board, laid flat, on the top section of the garage door near the center line. Rest the Rail on the board. NOTE: If the raised garage door hits the unit's Trolley (45), pull down on the Trolley Release Arm to disconnect the inner and outer Trolley sec-

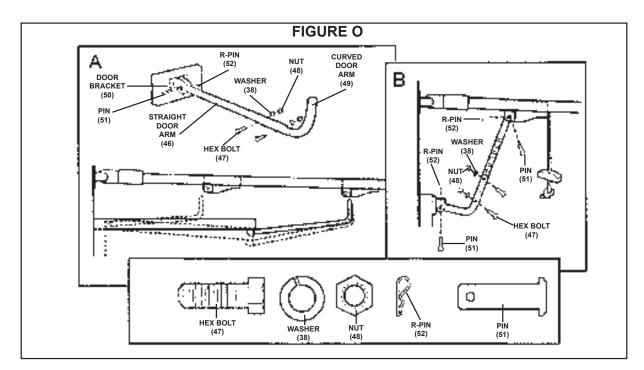
tions. The Trolley can remain disconnected until connecting the Straight Door Arm (46) to the Trolley is completed. (See Figure L.)



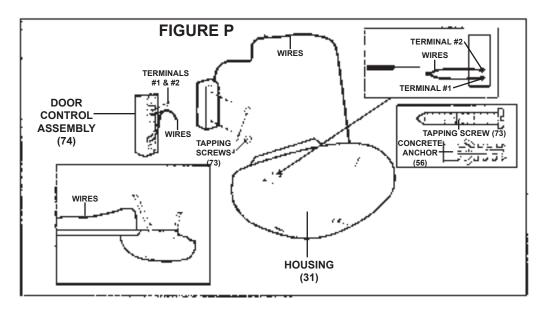
- 15. Lift the garage door to its full open position, and rest the Garage Door Opener on the garage door. Insert one Hex Bolt (26), with its thread facing outward, into an Angle Bracket (24) located on each side of the Housing (31). (See Figure M.)
- 16. Bend the two Hanging Brackets (28) so they are flat against the ceiling. Lift the Housing (31) until the Rail (35) is parallel to the ceiling. If necessary, use a carpenter's level. Insert a hole in the Hanging Brackets onto the previously installed Hex Bolts (26) on each side of the Housing. Secure the bottom portion of the Hanging Brackets to the Housing using one Nut (27) for each Hex Bolt. (See Figure M.)
- 17. For concrete ceilings, drill 5/16" diameter pilot holes into the ceiling and insert the Concrete Anchors (30). Secure the Hanging Brackets (28) to the ceiling with Hex Tapping Screws (29). For wood ceilings, drill 5/32" diameter pilot holes and secure with the Tapping Screws (29). (See Figure M.)



18. **For sectional and one-piece door installation:** The Door Bracket (50) has two mounting holes. Center the Door Bracket at the top inside surface of the garage door. Then secure the Door Bracket to the door using two Hex Tapping Screws (53). **(See Figure N.)** 



- 19. Fasten the Straight Door Arm (46) and Curved Door Arm (49) together to the longest possible length (with a 2 or 3 hole overlap) using two Hex Bolts (47) and two Nuts (48). (See Figure O, *Illustration A.*)
- With the garage door closed connect the Straight Door Arm (46) section to the Door Bracket (50) with a Pin (51). Secure the Pin with an R-Pin (52).
   (See Figure O, *Illustration A.*)
- 21. Disconnect the inner and outer Trolley (45). Slide the outer Trolley back toward the Housing (31) and join the Curved Door Arm (49) to the connector hole in the Trolley with a Pin (61). Secure with an R-Pin (62). NOTE: It may be necessary to lift the garage door slightly to make the connection. (See Figure O, *Illustration A*.)
- 22. IMPORTANT: When setting the "up limit", the garage door should not have a backward slant when fully open. A slight backward slant will cause unnecessary bucking and/or jerking operation as the door is being opened or closed from the fully open position. (See Figure O, Illustration A.)
- 23. For sectional door installation, connect according to **Figure O**, *Illustration B*.

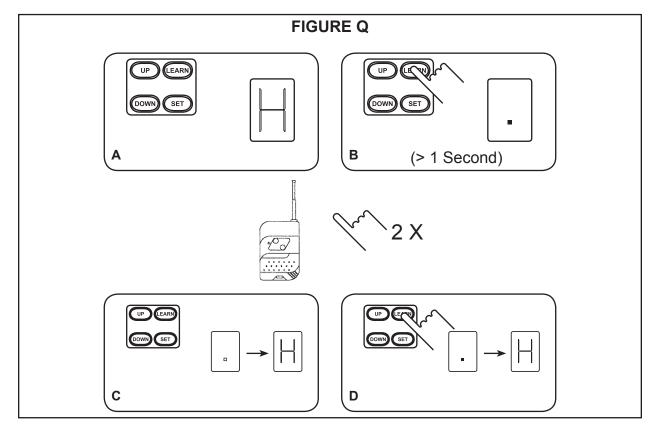


- 24. Locate the Door Control (74) assembly where the garage door is visible, away from the garage door and out of reach of children. Mount the Door Control assembly at least 5 feet above the floor. (See Figure P.)
- **WARNING!** Serious personal injury from a moving garage door may result from misuse of the Door Control (74) assembly or Remote Controls (75). Do not allow children to operate the Door Control assembly or Remote Controls.
- 25. There are two Terminals on the back of the Door Control (74) assembly. Strip about 1/4" of insulation from the ends of the two Wires provided. Separate the two Wires enough to connect to Terminal Screw #1 and Terminal Screw #2 on the back of the Door Control assembly. (See Figure P.)
- 26. Fasten the Door Control (74) assembly to an inside garage wall with the Tapping Screws (73) provided. Drill two 5/32" diameter holes and use Concrete Anchors (56) if installing into drywall. A convenient location is beside the service door and out of reach of children. (See Figure P.)
- 27. Run the Wires up the wall and across the ceiling to the Garage Door Opener. Use insulated Staples (not included) to secure the Wires. The Quick Connect Terminals are located on the side of the Housing (31). Connect the Wires to **Terminal #1** and **Terminal #2** on the Housing. (See Figures B and P.)
- 28. To operate the Door Control (74) assembly, plug the Power Cord (9) into the nearest 120 volt, grounded, electrical outlet. Press the Button of the Door Control assembly to open or close the garage door. Press again to stop the door while it is moving. (See Figure P.)

#### **ADJUSTMENT**

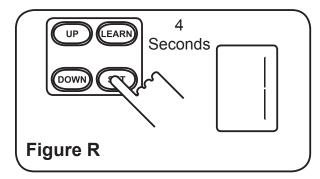
#### **Setting Remote Control Codes:**

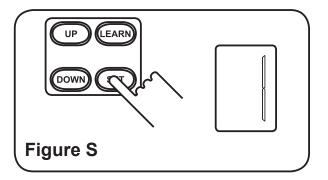
1. The Garage Door Opener's Receiver and Remote Controls (75) transmitter are set to a matching code. If you purchase additional Remote Controls, the Garage Door Opener must be programmed to accept the new Remote Control.



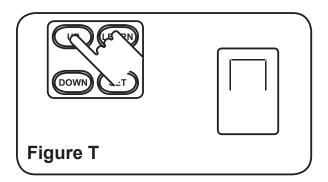
- 2. Plug the Power Cord (9) into the nearest 120 volt, grounded, electrical outlet. The Digital Display on the Housing (31) will flash with "H", and the Light will illuminate. The unit is in standby. (See Figure Q, *Illustration A.*)
- 3. Press and hold the "LEARN" Button for more than a second. The Digital Display will indicate ".". (See Figure Q, *Illustration B*.)
- 4. Press the Key twice on the Remote Control (75) that you wish to operate the Garage Door Opener, and "·" will flash several times before "H" appears. Now the Garage Door Opener has learned the code. (See Figure Q, *Illustration C*.)
- 5. NOTE: If you want the Garage Door Opener to learn additional remote codes, repeat the above steps. The Opener can learn up to six remote codes.
- 6. To erase all Remote Control (75) codes, press and hold the "LEARN" Button. The Digital Display will indicate "." before indicating "H". The codes are now erased when the Digital Display flashes with "H". (See Figure Q, *Illustration D*.)

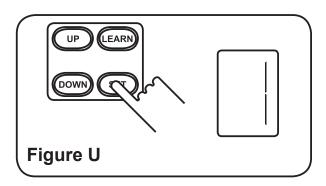
#### **Setting Opening Limit:**





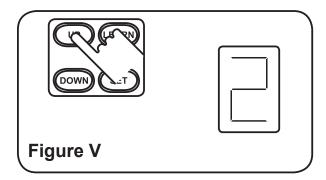
7. Press and hold the "SET" Button for more than four seconds. The Digital Display will indicate "1". Press and release the "SET" Button again and "1" will flash in the Digital Display. Now the unit will enter into a *limit setting* mode. (See Figures R and S.)

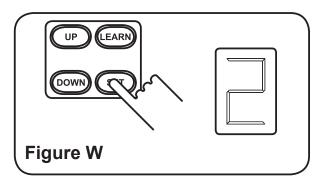




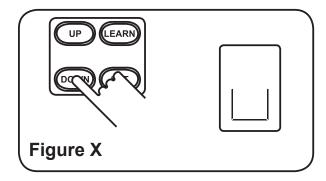
8. Press and hold the "UP" Button. The unit's Motor will move the door towards the open position. The Digital Display will indicate "n" and the Motor will move the door upward. Release the Button when the door reaches the desired OPEN position. The Motor will then stop running. Press the "DOWN" Button. The Motor will move the door towards the closed position. The Digital Display will indicate "u" and the Motor will move the door downward. The OPEN position can be adjusted by pressing the "UP/DOWN" Button. Press the "SET" Button when the door reaches the desired OPEN position to store the data. The Digital Display will indicate "1" which will glow steadily. Now the setting for the open limit is finished. (See Figures T and U.)

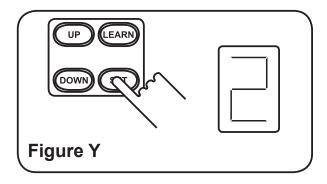
#### **Setting Closing Limit:**



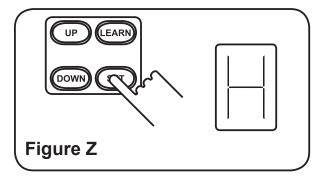


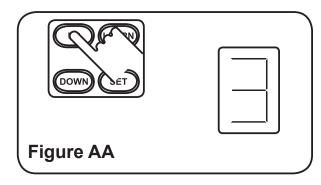
9. Press the "**UP**" Button and the Digital Display will indicate "**2**". Press and release the "**SET**" Button. The Digital Display will indicate a flashing "**2**". The unit is now ready for setting the *close limit*. (**See Figures V and W.**)





10. Press the "DOWN" Button. The Motor will move the door towards the close position. The Digital Display will indicate a flashing "u". The CLOSE position can be adjusted by pressing the "UP/DOWN" Button. Press the "SET" Button when the door reaches the desired CLOSE position to store the data. The Digital Display will indicate a steadily glowing "2". (See Figures X and Y.)

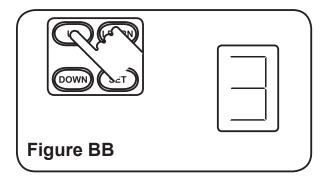


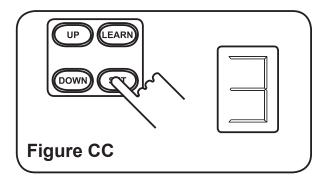


11. The unit is waiting for you to enter other modes. Press the "SET" Button if no other setting is to be programmed right now. The Digital Display will indicate "H". Now setting the limits is finished. (See Figures Z and AA.)

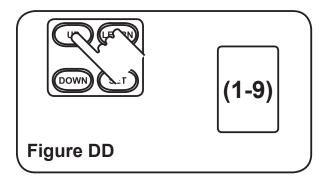
Note: If only the OPEN/CLOSE limit is set, the function of automatic closing and the Light Switch is not available in the unit, and the default Open/Close Force is "4" level.

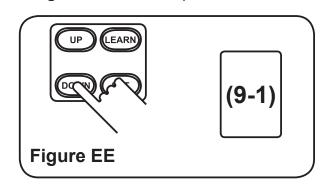
#### **Setting Opening Force:**



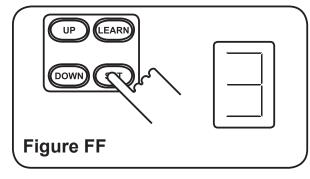


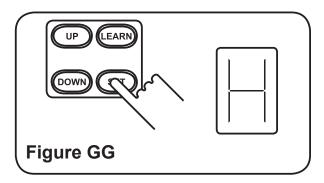
12. Press and hold the "SET" Button for more than four seconds. Repeatedly press the "UP" Button until the Digital Display indicates "3". Press and release the "SET" Button. The Digital Display will indicate a flashing "3". Now the unit will enter into a *Force Adjustment* mode. (See Figures BB and CC.)





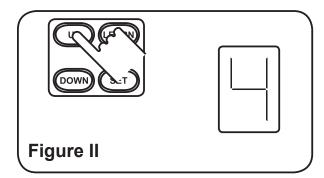
13. Press and release the "UP" Button. The Digital Display will show a flashing "1" - "9" (default value is "4") which indicates the open force level. "1" is the minimum force, and "9" is the maximum force. Each time you press and release the "UP" Button, the figure increases by 1, and the force increases to a higher level. Each time you press and release the "DOWN" Button, the figure decreases by 1, and the force decreases to a lower level. (See Figures DD and EE.)

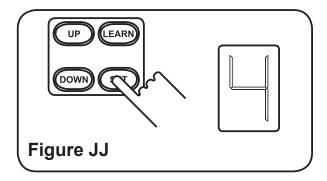




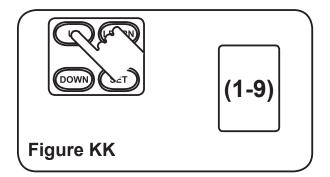
14. Press the "SET" Button to store the data when the desired open force is set. The Digital Display will indicate a steadily glowing "3". The unit is ready for setting another parameter. If no other setting is to be programmed right now, press the "SET" Button. The Digital Display will indicate "H". Now the *open force* adjustment is finished. (See Figures FF and GG.)

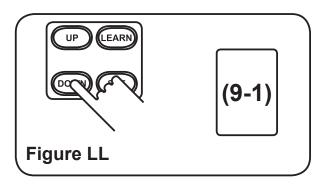
#### **Setting Closing Force:**



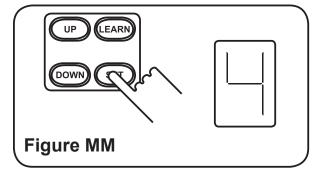


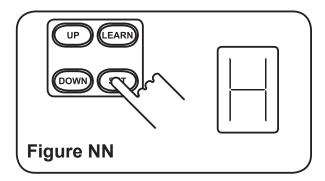
15. Press and hold the "SET" Button for more than four seconds. The Digital Display will indicate "1". Repeatedly press the "UP" Button until the Digital Display indicates "4". Press and release the "SET" Button. The Digital Display will indicate a flashing "4". Now the unit enters into the *close force* mode. (See Figures II and JJ.)





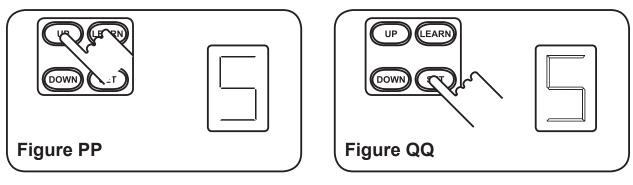
16. Press and release the "**UP**" Button. The Digital Display will show a flashing "**1**" - "**9**" (default value is "**4**") which indicates the open force level. "**1**" is the minimum force, and "**9**" is the maximum force. Each time you press and release the "**UP**" Button, the figure increases by 1, and the force increases to a higher level. Each time you press and release the "**DOWN**" Button, the figure decreases by 1, and the force decreases to a lower level. (**See Figures KK and LL.**)



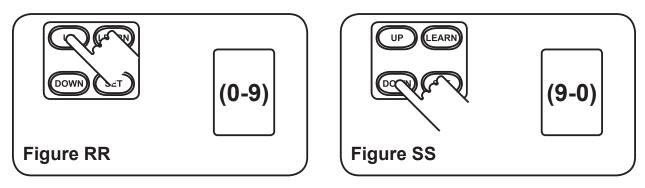


17. Press the "SET" Button to store the data when the open force is set. The Digital Display will indicate a steadily glowing "4". The unit is ready for setting another parameter. If no other setting is to be programmed right now, press the "SET" Button. The Digital Display will indicate "H". Now the *close force* setting is finished. (See Figures MM, NN, and OO.)

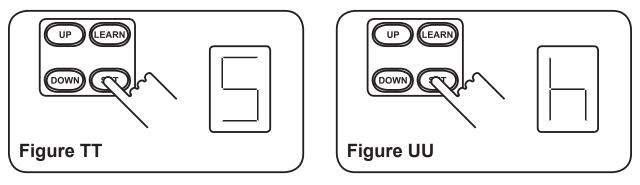
#### **Setting Automatic Closing Time:**



18. Press and hold the "SET" Button for more than four seconds. Press the "UP" Button and choose figure "5". Press and release the "SET" Button. The Digital Display will indicate a flashing "5". Now the unit enters into the setting the automatic closing time mode. (See Figures PP and QQ.)



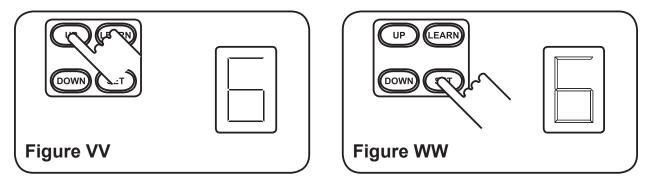
19. Press and release the "**UP**" Button. The Digital Display will show a flashing "**1**" - "**9**" (default value is "**0**", automatic closing function is disabled) which indicates the current automatic closing time. The minimum time is one minute, 9 minutes maximum. Each time you press and release the "**UP**" Button, the figure increases by 1, and the timing increases by one minute. Each time you press and release the "**DOWN**" Button, the figure decreases by 1, and the timing decreases by one minute. When the timing is 0, it means the automatic closing function is closed. (**See Figures RR and SS.**)



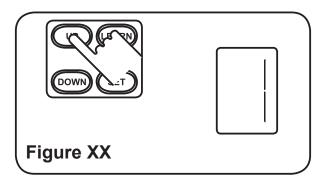
20. Press the "**SET**" Button to store the data when the desired automatic closing time is set. The Digital Display will indicate a steadily glowing "**5**". The unit is ready for setting another parameter. If no other setting is to be programmed right now, press

the "SET" Button. The Digital Display will indicate "h". Now the automatic closing time has been set. (See Figures TT and UU.)

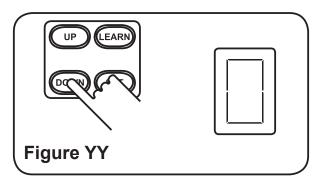
#### **Setting Automatic Closing Time:**



21. Press and hold the "**SET**" Button for more than four seconds. Press the "**UP**" Button and choose figure "**6**". Press and release the "**SET**" Button. The Digital Display will indicate a flashing "**6**". Now the unit enters into the setting the photocell detector mode. (**See Figures VV and WW.**)



22. If there is a photocell detector installed, press the "UP" button and the display will show a "1", indicating that it is enabled. (See Figure XX.)



- 23. If there is no photocell detector installed, press the "**DOWN**" button and the display will show a "0". (See Figure YY.)
- 24. Press the "SET" button when finished setting the photocell mode.

#### To test the safety reverse system:

- 25. The safety reverse system test is important. The garage door must reverse on contact with a **1-1/2**" thick obstacle laid flat on the garage floor. Failure to properly adjust the Garage Door Opener may result in serious personal injury from a closing garage door. Repeat this test once a month and adjust as needed.
- 26. Place a 1-1/2" thick obstacle flat on the floor under the garage door. Operate the door in the down direction. The door must reverse on the obstruction. If the door stops on the obstruction, remove the obstruction and repeat the "Setting the Limits" section in this manual. Then repeat step #22.
- 27. When the garage door reverses on the 1-1/2" obstacle, remove the obstruction and run the Garage Door Opener through a complete travel cycle. The door must not reverse in the closed position. If it does, repeat the "Setting the Limits" and "Opening/Closing Force" sections in this manual. Then repeat step #22.
- 28. Finally, place about 40 pounds of weight at the center of the garage door to ensure that the door will not move up more than 20 inches when attempting to raise.
- 29. The **Light Bulb** will automatically illuminate when the garage door is activated and will shut off after three minutes with no control activity.

# MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

# **AWARNING**

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Unplug the Garage Door Opener from its electrical Outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

- BEFORE EACH USE, inspect the general condition of the Garage Door Opener. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
- 2. LIMIT AND FORCE SETTINGS:
  Weather conditions may cause some minor changes in the Door operation, requiring some re-adjustments particularly during the first year of operation. Always repeat the "Safety Reverse" test after any adjustment. Refer to manual for instructions.

- 3. REMOTE CONTROL: The alkaline Batteries (23AE12V) should produce power for up to three months. If the transmission range decreases, replace the Battery. To do so, use a screwdriver blade to pry open the Cover. Insert the new Battery positive side up. Then replace the Cover. Do not dispose of the old Battery with household waste. Take the Battery to a proper disposal center.
- OPENER LIGHT: To replace the Opener Light open the Light Cover (34). Unscrew and remove the old Light Bulb, and replace with a new 25 Watt Light Bulb.
- 5. AWARNING! If the Power Cord of this Garage Door Opener is damaged, it must be replaced only by a qualified service technician.

# PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

	TROUBLESHOOTING				
Problem	Possible Causes	Possible Solutions			
Opener does not operate with Remote.	<ol> <li>No power at outlet.</li> <li>Power Cord not connected.</li> <li>Garage Door is locked.</li> <li>Excessive build-up of ice, snow, dirt, and/or debris under Garage Door.</li> <li>Garage Door is frozen to the ground.</li> <li>Remote Control Battery low.</li> <li>Opener and Remote Control not properly programmed.</li> <li>Door Control Button flashing. Opener</li> </ol>	1. Check power at outlet. 2. Check that Power Cord is plugged in. 3. Disengage all locks on Garage Door. 4. Clean out from under Garage Door. 5. Thaw out area under Garage Door. 6. Replace Remote Control Battery. 7. Program both Opener and Remote Control. 8. If you have a "multi-function" Door Control, push and			
Remote Control has short range.	is in "lock" mode.  1. No Battery or low Battery.	hold the Lock Button for 2 seconds. The Door Control Button will stop flashing.  1. Make sure a fully charged Battery is installed in Remote Control.			
	Obstacle within auto blocking Remote Control transmission.     A metal Garage Door, foil-backed insulation, or metal siding will reduce the transmission range.	Change the location of the Remote Control in the auto.     Install a wood Garage Door. Remove foil-backed insulation and/or metal siding.			
Garage Door reverses for no apparent reason, and Opener Light does not blink.	Garage Door is being obstructed.     Excessive build-up of ice, snow, dirt, and/or debris on area where Garage Door closes.     Improper adjusted "Setting Limits" and "Force".	Pull Manual Release Handle. Operate Door manually. If the Door is unbalanced or binding, have a qualified service technician repair.     Clean out from under Garage Door.      Properly adjust "Setting Limits" and "Force". Repeat "Safety Reverse Test" after adjustments are made.			
Garage Door opens and closes by itself.	Remote Control Push Button stuck in "ON" position.	Make sure Remote Control Push Button operates freely.			
Garage Door stops, but does not close completely.	"Setting the Limits" function improperly adjusted.	Properly adjust the "Setting the Limits" function. Repeat "Safety Reverse" test after any adjustment of Door arm length, close force, or down limit.			
Opener Light does not turn on.	Burned out Bulb.	Replace old Bulb with a new 25 Watt Bulb.			
Opener strains.	Garage Door may be unbalanced or Springs are broken.	Close Garage Door and use Manual Release Rope and Handle to disconnect Trolley. Open and close Door manually. A properly balanced Door will stay in any point of travel while being supported entirely by its Springs. If it does not, have a qualified service technician correct the problem.			
Opener Motor "hums" briefly, then will not work.	Garage Door Springs are broken. If problem occurs on first operation of Opener, the Garage Door is locked.	See above. Disable all Door locks. Repeat "Safety Reverse" test after adjustment is complete.			
Opener will not activate due to power failure.	No electrical power to unit.	Pull Manual Release Rope and Handle down and back to disconnect Trolley. Door can be opened and closed manually. When power is restored, pull the Manual Release Handle straight down. The next time the Opener is activated, the Trolley will reconnect.			



Follow all safety precautions whenever diagnosing or servicing the Garage Door Opener. Disconnect power supply before service.

# PARTS LIST

Part #	Description	Qty.
1	Base	1
2	PCB Board	1
3	Tapping Screw	4
4	DC Motor	1
5	Hex Screw	3
6	Elastic Spacer	3
7	Power Terminal	1
8	Tapping Screw	2
9	Power Cord	1
10	Cable Latch	1
11	Tapping Screw	2
12	Bulb Seat	1
13	Connect Wire	1
14	Connector	1
15	Tapping Screw	1
16	Bulb	1
17	Hollow Bolt	1
18	Transformer	1
19	Mounting Board	1
20	Tapping Screw	4
21	Terminal	1
22	Terminal Cover	1
23	Tapping Screw	4
24	Angle Bracket	2
25	Inner Hex Bolt	4
26	Hex Bolt	2
27	Nut	2 2
28	Hanging Bracket	2
29	Hex Tapping Screw	2
30	Concrete Anchor	2
31	Housing	1
32	Tapping Screw	4
33	Film	1
34	Light Cover	1
35	Rail	4
36_	Bracket	2
37	Hex Bolt	4
38	Washer	4

Part #	Description	Qty.
39	Elastic Spacer	4
40	Sprocket Seat	1
41	Sprocket	1
42	Splined Sleeve	1
43	Rope & Handle	1
44	Rail Brace	3
45	Trolley	1
46	Straight Door Arm	1
47	Hex Bolt	2
48	Nut	2
49	Curved Door Arm	1
50	Door Bracket	1
51	Pin	1
52	R Pin	1
53	Hex Tapping Screw	2
54	Header Bracket	1
55	Hex Tapping Screw	2
56	Concrete Anchor	2
57	Pin	1
58	R Pin	1
59	Chain	1
60	Chain Lock	1
61	Pin	1
62	R Pin	1
63	Nut	1
64	Washer	1
65	Spring	1
66	Idler Pulley Seat	1
67	Locking Ring	1
68	Idler Pulley	1
69	Carriage Bolt	1
70	Pin	1
71	Chain Adjustment	1
72	Sprocket Cover	1
73	Tapping Screw	3
74	Door Control Button W/Wire	1
75	Remote Control	2

#### Record Product's Serial Number Here:\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

# **ASSEMBLY DIAGRAM** 얆 dier Pelley See 36 23 Sprocket Set 8 8 Idler Pulley Set 88

#### **LIMITED 90 DAY WARRANTY**

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESS-LY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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